

An  
Essay  
on  
Cynanche Trachealis

or

Croup

By Asahel Dearborn

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Spencer's School

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## *Cynanche Trachealis.*

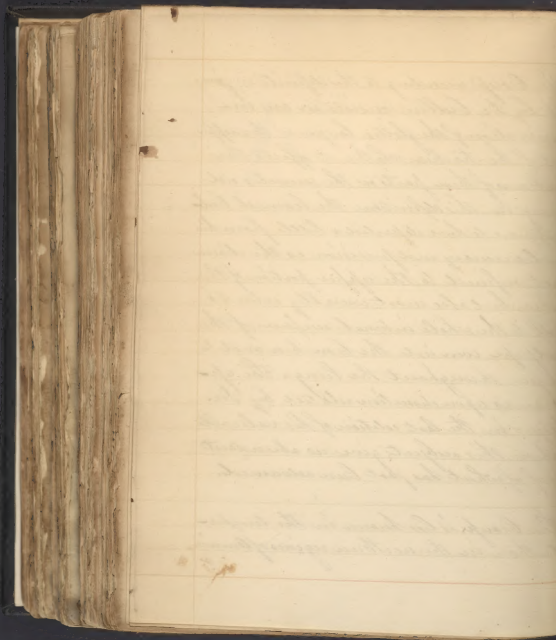
The vulgar name of this disease in Scotland is Croup and in this country it is Hoars. The latter is a corruption of the word hoars, which took its rise from the manner in which the lungs heave in respiration.

It has been called suffocatio stridula by Dr. Home and cynanche trachealis by Dr. Cullen. Dr. Frank called it tracheitis and Dr. Darwin considered it as a plugging of the windpipe. When a liquid matter has been found in the trachea, it has been denominated humoral, and when a membrane has been seen adhering to the trachea it has received from Dr. Michaelis the name of angina polyposa.



The Croup, according to the definitions given of it by Dr. Cullen, consists in an inflammation of the glottis, larynx or the upper part of the trachea, whether it affects the membranes of these parts or the muscles adjoining. In this definition the learned Cullen appears to have departed a little from his usual accuracy and precision, as the disease is not confined to the upper portion of the trachea, but also most usually extends itself to the whole internal surface of the wind pipe, even into the bronchia and to a degree throughout the lungs. The appearances upon dissection related by Dr. Cheyne in the last edition of his valuable work on this subject, give us abundant proof of what has just been advanced.

The Croup is less known in the temperate than in the northern regions of America.



It occurs chiefly in the winter and spring  
It is very prevalent in low situations  
exposed to an atmosphere passing over  
large bodies of water. It is, in short, brought  
on by those causes which induce fevers,  
pleuritis and other inflammatory diseases  
in cold and changeable climates.

It not infrequently makes its appearance  
suddenly, but oftener creeps on in the form  
of a slight catarrh and the child for a day  
or two appears shivery, fretful and inactive.

This disease is sometimes attendant on  
other affections of the system. Dr. Keach  
remarks "I have seen it accompany as well  
as succeed the small pox, measles, scarlet  
fever and aphthous sore throat." Hence  
the propriety of dividing this disease into  
two species, viz. idiopathic and symptomatic.





ate croup, id est, when the disease  
is primarily and exclusively seated in the  
trachea, bronchiae and surface of  
the lungs; symptomatic, when it is the  
consequence of some other previous disease

The Croup attacks children of all ages  
from a short time after birth until per-  
turbity. But the disease is generally confined  
to children from the age of one year to  
eight or ten. It but very seldom seizes  
children before they are weaned. It some-  
times attacks adults. The robust and healthy  
children are particularly liable to this  
complaint. It occurs but rarely in  
children exhausted by some other disease.  
The children of some families seem to be  
more subject to attacks of croup than others.  
Dr Cheyne tells us that he has had  
the clearest proof of this "It is difficult

and a great many  
other things of which I have  
not time to write  
I have only time to say  
that I am very  
much obliged to you  
for the trouble  
you have taken  
in writing to me  
and for the  
kindness of  
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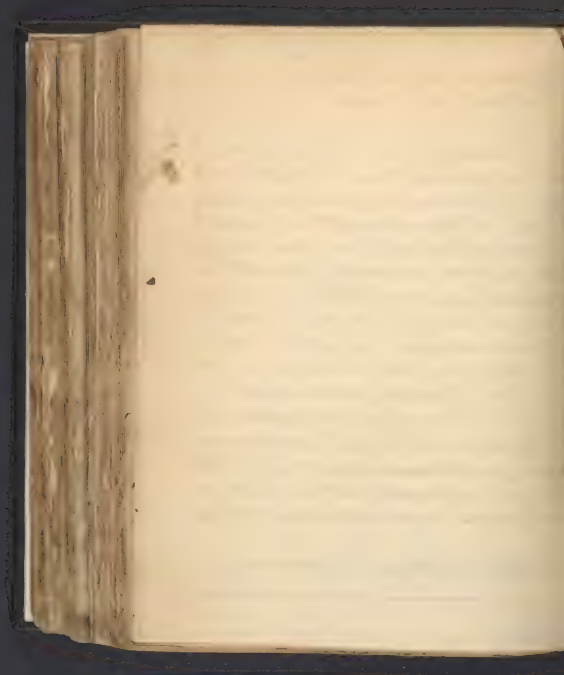
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in remarks is seen, whether this arises from  
a particular shade of education or is owing  
to peculiarity of condition on which  
children of the same family have in com-  
mon.

The Croup may be divided for rae-  
tial utility into three stages. The first  
may be denominated the forming stage,  
the second the febrile stage, the third  
the paroxysmal or last stage.

In the first stage the affection is local,  
the irritation has not extended to the  
whole system, the patient is drowsy and  
inactive, his skin is cool and moist, his  
pulse not much accelerated, his hoarse  
and hollow sounding cough, his wheez-  
ing expirations, his restless sleep and his ris-  
ing after a fit of laughing, all point out to



the nature of the disease.

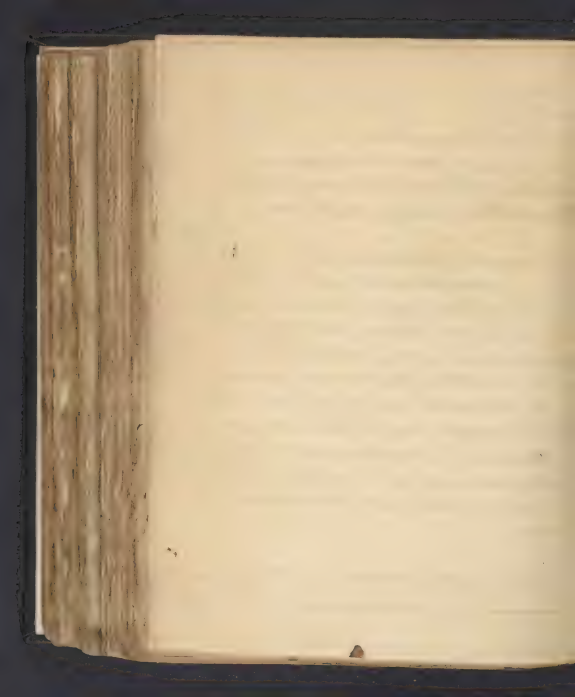
In the second stage the whole system partakes of the irritation. The pulse is hard & frequent. The skin hot and dry, respiration hurried, the tongue is moist & the white fur indicative of inflammation. The lips and cheeks are remarkably florid, the cough is frequent and attended with considerable mucus, every inspiration is attended with a more violent wheezing than in the first stage. The patient has not a moment's relief from his suffering and in a short time if the most energetic means are not employed for his relief, the emolument becomes ~~useless~~ <sup>unavailing</sup> sleep comes on <sup>and</sup> death either puts a period to all his sufferings or the disease runs on to its last stage.

In the last stage the effusion of



coagulable lymph has taken place, the  
symptoms of Liver abscess. The child is  
oppressed the face passive, pale, restless  
wails + has signs of coughing attended  
with irregular and <sup>spasmodic</sup> respiration  
as in diphtheria and <sup>with</sup> similar intervals of  
use. Some eruptions in very young  
children on the face but a short time  
before dissolution. But in children ar-  
rived at the age of eight or ten years,  
they frequently continue for four or five  
days.

The appearances to be observed on  
dissection when Gangra has terminated  
fatally, we are informed by Dr. Bail-  
lie, are, a layer of yellowish pulpy matter  
lining the inner membrane of trachea ex-  
tending from the upper part of the  
cavity of the larynx into the small

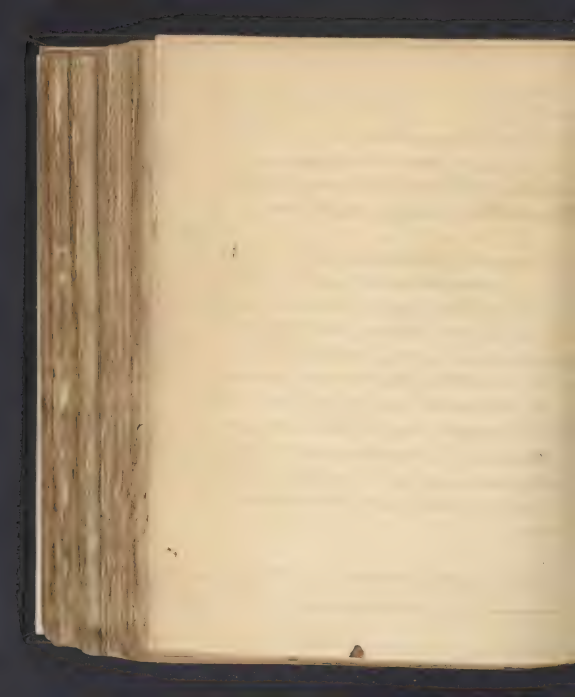




branches of the wind pipe, which are distributed throughout the substance of the lungs; a good deal of mucus is in the trachea and its branches, together with a very thin of pus.

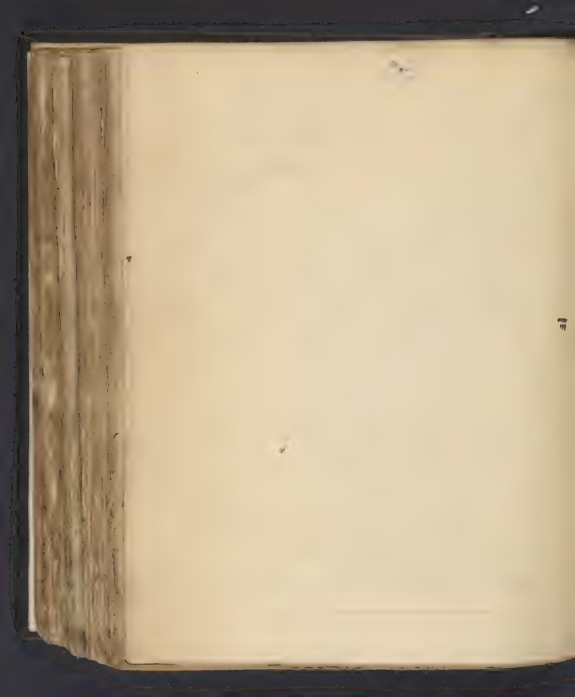
In a number of dissections which I made last spring under the direction of our preceptor the following appearances were observed in the trachea and lungs. 1st. A slight degree of inflammation. 2d. A thick puriform matter. 3d. A membrane similar to that, which succeeds inflammation of the pleura and bowels. 4th. In one case the trachea, the bronchia and the lungs exhibited no marks of disease of any kind. This case was violent and terminated suddenly.

When Croup terminates fatally, -



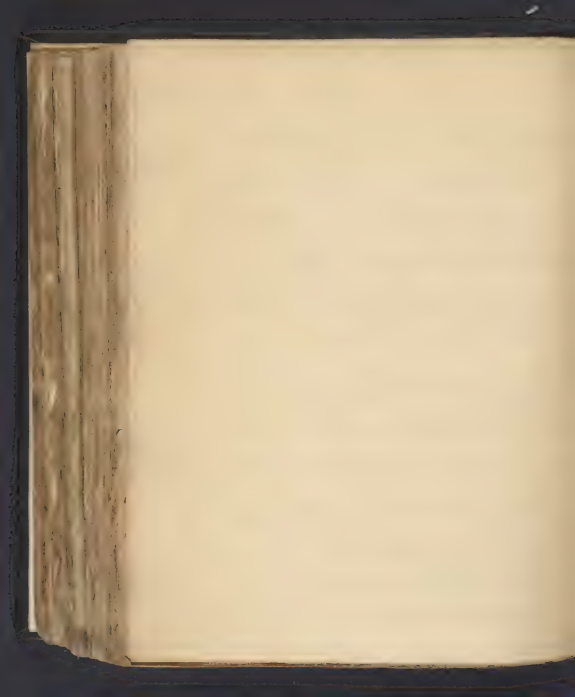
the patient is either stationary or the violence of the morbid action, or the inflammation has terminated by effusion. The effusion is a thick opaque substance, in quality very much like coagulable lymph, which, poured out on the inflamed surface of the trachea, & there deprived of its aqueous parts, constitutes the membrane so frequently found on dissections: that this is a rational explanation is proved beyond a doubt by analogies from other diseases for a membrane similar to this is found upon other secreting surfaces as in diseases of the pleura and intestines.

Respecting the treatment to be adopted for the cure of Hoarseness, I find no little difference of opinion among writers on the subject. Various remedies



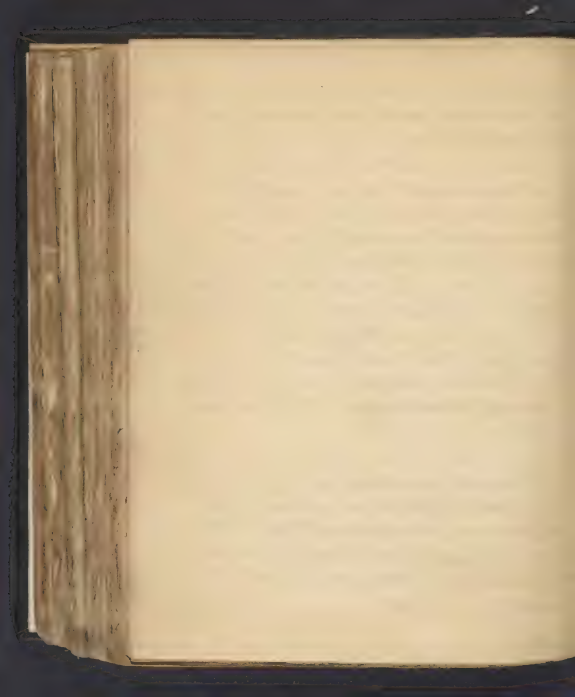
have been employed for its cure, some of which, possess powers very opposite in their nature. It is not my intention to consider all the remedies, which have been recommended, but merely to consider that plan of treatment, which appears to me the most successful. What I come to say on the subject, I shall arrange under three heads as applied to the three stages of the disease.

1<sup>st</sup>. The treatment of the first stage. In this <sup>stage</sup> of the disease, the best writers on the subject, direct us to use the most active means to restore the suppressed actions of the trachea and surface of the lungs, and by freely opening the bowels, and inducing perspiration, to guard against the general excitement of the system. For this purpose we are to



administer an emetic consisting of tar-  
tarized antimony and ipecacuanha. The  
dose for a child under two years old, is, from  
one to two grains of the former with the pro-  
portion to ten grains of the latter. The dose  
is to be repeated every half hour till it  
produces a plentiful secretion from the  
lungs. To prove effectual it should op-  
erate four or five times successively. Chil-  
dren will bear vomiting by most the  
operation of this class of medicines. If  
the bowels are not opened by the emetic  
a dose of calomel ought to be admin-  
istered.

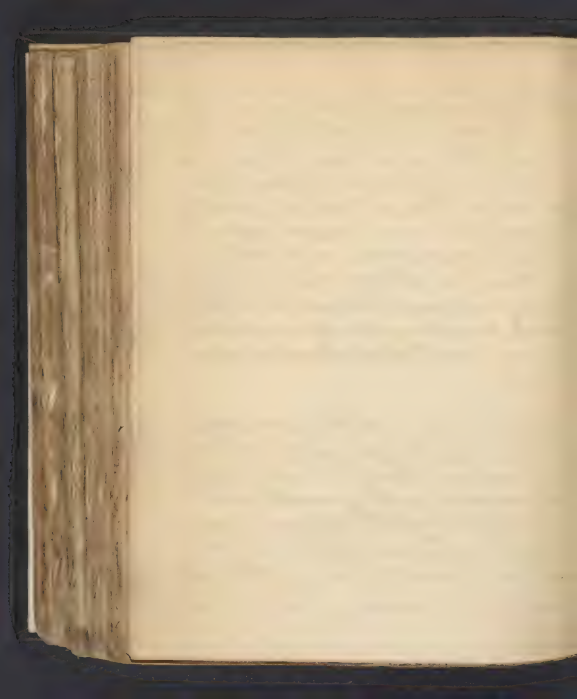
Calomel should always be given in  
large doses. A physician of considerable  
experience, informed me that he had  
given calomel in the dose of a dram  
to a child four months old with





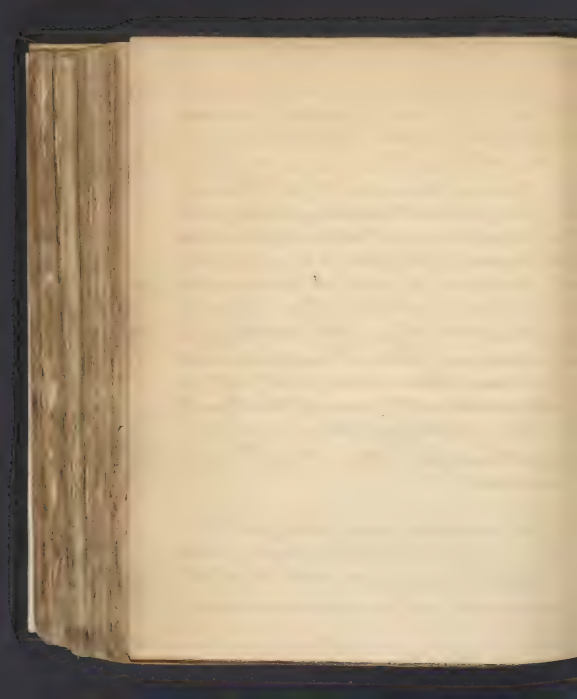
the happiest result. When given in large doses it seldom excites salivation. Dr. Rush remarks, "I have never known it to excite a salivation, when given to children, whose ages rendered them fit subjects for it." Its good effects seem to depend upon its exciting a counter action in the whole intestinal canal and thereby lessening the disposition of the tracheal blood-vessels to discharge the mucus or form the membrane which has been described.

2d. The treatment of the second stage. In this stage of disease, so great is the determination of blood to the part affected and such is the general excitement of the system the most prompt and efficacious means of reducing arterial action and of lessening the irri-



iation of the part affected becoming  
dispensably necessary. The first thing  
is to let blood either from the jugu-  
lar vein or the arm, to do this suc-  
ceeds is of the utmost importance in  
this as well as in all other inflammato-  
ry diseases. If the violent symptoms con-  
tinue after the first bleeding it ought  
to be repeated. The bleeding is urgent  
and must be large often not deliqui-  
um animi - this will sometimes arrest  
the disease like a charm. But not-  
withstanding the power of the lancet  
in this stage of Group, the urgency of  
symptoms often require auxiliary  
remedies.

The first and most powerful of  
these is the tartarized antimony which  
should always be given either in full

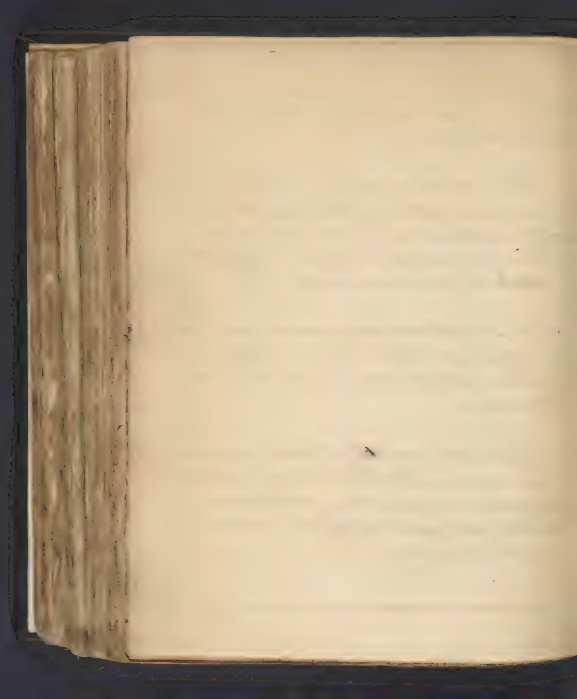


or nauseating doses during the violence of the disease.

The second auxiliary remedy is a purge, composed of calomel and jalap or rhubarb. It should ever follow the use of the antimony, if it fails to open the bowels.

The third remedy consists in blisters applied to the throat or breast, to the back part of the neck or extremities.

The last remedy, I shall mention is the warm bath. This is very unequivocal in its operation and seldom fails to give great relief. It is a most agreeable remedy.



3rd. The treatment of the third stage.  
In this stage, calomel in small  
and repeated doses, squills, the se-  
neca snake root and the vapour of  
vinegar and water are the remedies,  
which promise the greatest utility.  
These are the remedies best calculated  
to excite the secretions of the lungs with-  
out impairing the general powers of the  
system. Landbaum By quieting the cough  
will often produce the most salutary  
effects.

The sulphate of zinc has been em-  
ployed with decided advantage  
in this stage of Croup. Dr. Francis  
of the city of New York used the sul-  
phate of zinc after the membrane  
was formed with the happiest  
result.

The first thing I did was to  
go to the bank and see  
how much money I had  
left. I found it was  
just what I needed.  
I then went to the  
store and bought  
some things. I was  
very happy to see  
the things I had bought.  
I then went home and  
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The hyper sulphuris has been strongly recommended in France as successful in the cure of Croup.

When the disease resists all our remedies it has been recommended to perform the operation of laryngotomy, which affords the only chance of escape from suffocation by enabling the patient to breathe till the inflammation and swelling of the larynx may have time to subside. This operation when performed in an early stage of the disease is sometimes of the highest importance. When it is resorted to in the last stage of the complaint with the idea of extracting the adventitious membrane, it never is attended with any advantage. Such is the opinion of those surgeons, who have tried the experiment.

